EDOK - Application for Search Warrant (Revised 5/13)

United States District Court

EASTERN DISTRICT OF OKLAHOMA

In the Matter of the Search of Geolocation data of devices travelling through the Eastern District of Oklahoma on 03-18-2021, stored by Google LLC, 1600 Amphitheatre Parkway Mountain View, CA 94043	**SEALED** **Case No.** 21-MJ-120-SPS

AMENDED APPLICATION FOR SEARCH WARRANT

I, Dustin Thornton, a federal law enforcement officer or an attorney for the government, request a search warrant and state under penalty of perjury that I have reason to believe that there is now concealed on the following person or property located in the **EASTERN** District of **OKLAHOMA** *(identify the person or describe property to be searched and give its location)*:

SEE ATTACHMENT "A"

The person or property to be searched, described above, is believed to conceal *(identify the person or describe the property to be seized)*:

SEE ATTACHMENT "B"

The basis for the search under Fed. R. Crim. P. 41(c) is *(check one or more)*:

- ☒ evidence of a crime;
- ☐ contraband, fruits of crime, or other items illegally possessed;
- ☐ property designed for use, intended for use, or used in committing a crime;
- ☐ a person to be arrested or a person who is unlawfully restrained.

The search is related to a violation of Title 18, United States Code, Section(s) 1112, 1151 and 1153, and the application is based on these facts:

- ☒ Continued on the attached sheet.
- ☐ Delayed notice of _____ days (give exact ending date if more than 30 days: _____) is requested under 18 U.S.C. § 3103a, the basis of which is set forth on the attached sheet.

DUSTIN THORNTON
TASK FORCE OFFICER
FEDERAL BUREAU OF INVESTIGATION

Sworn to before me and signed in my presence.

Date: April 1 , 2021

Judge's signature

City and state: Muskogee, Oklahoma

STEVEN P. SHREDER
UNITED STATES MAGISTRATE JUDGE
Printed name and title and title

AMENDED AFFIDAVIT IN SUPPORT OF
AN APPLICATION FOR A SEARCH WARRANT

I, Dustin Thornton, being first duly sworn, hereby depose and state as follows:

INTRODUCTION AND AGENT BACKGROUND

1. I am employed by the Oklahoma Highway Patrol. I am a peace officer under the laws of Oklahoma and have the authority to investigate motor vehicle collisions and to assist other law enforcement agencies with the investigation of motor vehicle collisions. I have 17 years of law enforcement experience. I have been employed with the Oklahoma Highway Patrol for the past 12 years and graduated from the Oklahoma Highway Patrol Academy in 2009. I have attended over 4500 hours of Law Enforcement continuing education. During my training, I have received significant instruction in the field of vehicle collision investigations. During my career, I have investigated over 500 motor vehicle collisions.

2. I am "an investigative or law enforcement officer of the United States" within the meaning defined in 18 U.S.C. § 2510 (7), in that I am also a Task Force Officer assigned to the Federal Bureau of Investigation (FBI) Oklahoma Safe Trails Task Force. I am authorized by law to conduct investigations of traffic fatalities and collisions that occur in Indian Country as that term is defined in 18 U.S.C. § 1151.

3. I make this affidavit in support of an application for a warrant to search information that is stored at premises controlled by Google, an electronic communication service and remote computing service provider headquartered in Mountain View, California. The information to be searched is described in the following paragraphs and in Attachment A. This affidavit is made in support of an application for a warrant under 18 U.S.C. § 2703(c)(1)(A) to require Google to disclose to the Government the information further described in Attachment B.I. The Government

will then review that information and seize the information that is further described in Attachment B.II.

4. This affidavit is intended to show merely that there is sufficient probable cause for the requested warrant and does not set forth all of my knowledge about this matter.

5. Based on my training and experience and the facts as set forth in this affidavit, there is probable cause to believe that violations of Title 18, United States Code Sections 13, 1151, and 1152 as well as a violation of Title 47, Oklahoma Statutes, Section 10-102.1, have been committed by unknown person(s) There is also probable cause to search the information described in Attachment A for evidence of these crimes and for the identity of the person(s) further described in Attachment B.

JURISDICTION

6. This Court has jurisdiction to issue the requested warrant because it is "a court of competent jurisdiction" as defined by 18 U.S.C. § 2711. Specifically, the Court is "a district court of the United States . . . that has jurisdiction over the offense being investigated." 18 U.S.C. § 2711(3)(A)(i).

BACKGROUND RELATING TO GOOGLE AND RELEVANT TECHNOLOGY

7. Based on my training and experience, I know that cellular devices, such as mobile telephone(s), are wireless devices that enable their users to send or receive wire and/or electronic communications using the networks provided by cellular service providers. Using cellular networks, users of many cellular devices can send and receive communications over the Internet.

8. I also know that many devices, including but not limited to cellular devices, have the ability to connect to wireless Internet ("wi-fi") access points if the user enables wi-fi connectivity. These devices can, in such cases, enable their users to send or receive wire and/or

electronic communications via the wi-fi network. A tablet such as an iPad is an example of a device that may not have cellular service but that could connect to the Internet via wi-fi. Wi-fi access points, such as those created through the use of a router and offered in places like homes, hotels, airports, and coffee shops, are identified by a service set identifier ("SSID") that functions as the name of the wi-fi network. In general, devices with wi-fi capability routinely scan their environment to determine what wi-fi access points are within range and will display the names of networks within range under the device's wi-fi settings.

9. Based on my training and experience, I also know that many devices, including many cellular and mobile devices, feature Bluetooth functionality. Bluetooth allows for short-range wireless connections between devices, such as between a device such as a cellular phone or tablet and Bluetooth-enabled headphones. Bluetooth uses radio waves to allow the devices to exchange information. When Bluetooth is enabled, a device routinely scans its environment to identify Bluetooth devices, which emit beacons that can be detected by devices within the Bluetooth device's transmission range, to which it might connect.

10. Based on my training and experience, I also know that many cellular devices, such as mobile telephones, include global positioning system ("GPS") technology. Using this technology, the device can determine its precise geographical coordinates. If permitted by the user, this information is often used by applications (apps) installed on a device as part of the apps' operation.

11. Based on my training and experience, I know Google is a company that, among other things, offers an operating system ("OS") for mobile devices, including cellular phones, known as Android. Nearly every device using the Android operating system has an associated

Google account, and users are prompted to add a Google account when they first turn on a new Android device.

12. In addition, based on my training and experience, I know that Google offers numerous apps and online-based services, including messaging and calling (*e.g.*, Gmail, Hangouts, Duo, Voice), navigation (Maps), search engine (Google Search), and file creation, storage, and sharing (*e.g.*, Drive, Keep, Photos, and YouTube). Many of these services are accessible only to users who have signed in to their Google accounts. An individual can obtain a Google account by registering with Google, and the account identifier typically is in the form of a Gmail address (*e.g.*, example@gmail.com). Other services, such as Maps and YouTube, can be used with limited functionality without the user being signed into a Google account.

13. Based on my training and experience, I also know Google offers an Internet browser known as Chrome that can be used on both computers and mobile devices. A user has the ability to sign-in to a Google account while using Chrome, which allows the user's bookmarks, browsing history, and other settings to be uploaded to Google and then synced across the various devices on which the subscriber may use the Chrome browsing software, although Chrome can also be used without signing into a Google account. Chrome is not limited to mobile devices running the Android operating system and can also be installed and used on Apple devices and Windows computers, among others.

14. Based on my training and experience, I know that, in the context of mobile devices, Google's cloud-based services can be accessed either via the device's Internet browser or via apps offered by Google that have been downloaded onto the device. Google apps exist for, and can be downloaded to, devices that do not run the Android operating system, such as Apple devices.

15. According to my training and experience, as well as open-source materials published by Google, I know that Google offers accountholders a service called "Location History," which authorizes Google, when certain prerequisites are satisfied, to collect and retain a record of the locations where Google calculated a device to be based on information transmitted to Google by the device. That Location History is stored on Google servers, and it is associated with the Google account that is associated with the device. Each accountholder may view their Location History and may delete all or part of it at any time.

16. Based on my training and experience, I know that the location information collected by Google and stored within an account's Location History is derived from sources including GPS data and information about the wi-fi access points and Bluetooth beacons within range of the device. Google uses this information to calculate the device's estimated latitude and longitude, which varies in its accuracy depending on the source of the data. Google records the margin of error for its calculation as to the location of a device as a meter radius, referred to by Google as a "maps display radius," for each latitude and longitude point.

17. Based on open-source materials published by Google and my training and experience, I know that Location History is not turned on by default. A Google accountholder must opt-in to Location History and must enable location reporting with respect to each specific device and application on which they use their Google account in order for that usage to be recorded in Location History. A Google accountholder can also prevent additional Location History records from being created at any time by turning off the Location History setting for their Google account or by disabling location reporting for a particular device or Google application. When Location History is enabled, however, Google collects and retains location data for each device with Location Services enabled, associates it with the relevant Google account, and then

uses this information for various purposes, including to tailor search results based on the user's location, to determine the user's location when Google Maps is used, and to provide location-based advertising. As noted above, the Google accountholder also has the ability to view and, if desired, delete some or all Location History entries at any time by logging into their Google account or by enabling auto-deletion of their Location History records older than a set number of months.

18. Location data, such as the location data in the possession of Google in the form of its users' Location Histories, can assist in a criminal investigation in various ways. As relevant here, I know based on my training and experience that Google has the ability to determine, based on location data collected and retained via the use of Google products as described above, devices that were likely in a particular geographic area during a particular time frame and to determine which Google account(s) those devices are associated with. Among other things, this information can indicate that a Google accountholder was near a given location at a time relevant to the criminal investigation by showing that his/her device reported being there.

19. Based on my training and experience, I know that when individuals register with Google for an account, Google asks subscribers to provide certain personal identifying information. Such information can include the subscriber's full name, physical address, telephone numbers and other identifiers, alternative email addresses, and, for paying subscribers, means and source of payment (including any credit or bank account number). In my training and experience, such information may constitute evidence of the crimes under investigation because the information can be used to identify the account's user or users. Based on my training and my experience, I know that even if subscribers insert false information to conceal their identity, this information often provide clues to their identity, location, or illicit activities.

20. Based on my training and experience, I also know that Google typically retains and can provide certain transactional information about the creation and use of each account on its system. This information can include the date on which the account was created, the length of service, records of login (*i.e.*, session) times and durations, the types of service utilized, the status of the account (including whether the account is inactive or closed), the methods used to connect to the account (such as logging into the account via the provider's website), and other log files that reflect usage of the account. In addition, Google often has records of the Internet Protocol address ("IP address") used to register the account and the IP addresses associated with particular logins to the account. Because every device that connects to the Internet must use an IP address, IP address information can help to identify which computers or other devices were used to access the account.

PROBABLE CAUSE

21. On March 18, 2021, at 21:54 hours, a fatal traffic collision occurred at the intersection of U.S. Highway 62 and South 460 Road in Cherokee County, Oklahoma. This location is within the Eastern District of Oklahoma and within the definition of "Indian Country" as it occurred within the boundaries of the Cherokee Nation reservation.

22. Affiant and other Troopers of the Oklahoma Highway Patrol were dispatched to the scene. Based on our observation of evidence at the scene, including debris from a vehicle, and speaking to witnesses, investigators determined that a female later identified as J[redacted] D[redacted], was travelling southbound on South 460 Rd. on her bicycle and was attempting to cross U.S. 62, when she was struck by an unknown vehicle travelling westbound on U.S. 62. D[redacted] was assisted by another motorist until she was transported by air ambulance to St. John Hospital in Tulsa. She later died from her injuries. D[redacted] was confirmed as a member of the Cherokee Nation.

23. The location of the collision is a rural, four-lane highway separated by an unimproved median. There are no traffic control devices. There are a small number of commercial businesses and residences located near the intersection. I was able to retrieve surveillance video from several nearby businesses. A review of the videos shows that the collision occurred at 21:54 hours and that shortly after the collision, the suspect vehicle pulled over to the shoulder of the highway a short distance from the collision. The suspect vehicle stopped for approximately 10 seconds before resuming westbound travel on U.S. 62 and leaving the scene. In the one-minute timespan after the collision, the videos show six other vehicles travelling through the collision area. Five of the six vehicles are travelling eastbound.

24. Based on my training and experience, as well as a review of professional literature, a vast majority of motorists not only own but *use* their smartphones while driving. In one of the largest and most comprehensive distracted driving studies to date, involving the collection and analysis of data from over 570-million trips driven by three million motorists over a three-month time period, drivers used their smartphones in 88 out of every 100 trips. Cameron Jahn, *Largest Distracted Driving Behavior Study*, Zendrive (Apr. 17, 2017), http://blog.zendrive.com/blog/distracted-driving/; Angie Schmitt, *Study: Drivers with Smart Phones Use Them Almost Every Time They Drive*, StreetsBlogUSA (Apr. 17, 2017), https://usa.streetsblog.org/2017/04/17/study-drivers-with-smart-phones-use-them-almost-every-time-they-drive. Despite legislative efforts and public awareness campaigns to curb cellphone use while driving, research suggests that the number of motorists who use their cellphones has been trending upward. *See, e.g.*, Jeff Plungis, *Drivers Still Can't Keep Hands Off Phones, Study Finds*, Consumer Reports (Jan. 24, 2019), https://www.consumerreports.org/car-safety/distracted-

driving-study-drivers-cant-keep-hands-off-phones (noting that in one study, the number of motorists using cellphones while driving increased 57 percent from 2014 to 2018).

25. Based on my training, experience, and a review of professional literature, a significant number of collisions occur as a result of distracted driving from a variety of sources, including cellphone use. *See, e.g.,* Nat'l Highway Traffic Safety Admin., *Distracted Driving 2018* (2020) *available at* https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812926. Additionally, it has also been my experience that persons involved in a collision often use their cellphone immediately or shortly after a collision if not to call emergency services, then to call family members or friends.

26. Based on the foregoing, I submit that there is probable cause to search information that is currently in the possession of Google and that relates to the devices that reported being within the Target Location described in Attachment A during the time period described in Attachment A for evidence of the crime(s) under investigation. The Target Location is a stretch of U.S. 62 with an approximate area of 1000' by 170'. As noted in Attachment A, the time period requested is two minutes before and two minutes after the time of the collision. The information to be searched includes (1) identifiers of each device; (2) the location(s) reported by each device to Google and the associated timestamp; and (3) basic subscriber information for the Google account(s) associated with each device. Additionally, so at to minimize data collection of devices not belonging to the unknown driver, the Government is requesting that Google exclude any devices within the Target Location for longer than three minutes.

27. The proposed warrant sets forth a multi-step process whereby the Government will obtain the information described above. Specifically, as described in Attachment B.I:

a. Using Location History data, Google will identify those devices that it calculated were or could have been (based on the associated margin of error for the estimated latitude/longitude point) within the Target Location described in Attachment A during the time period described in Attachment A. For each device, Google will provide a anonymized identifier, known as a Reverse Location Obfuscation Identifier ("RLOI"), that Google creates and assigns to device for purposes of responding to this search warrant; Google will also provide each device's location coordinates along with the associated timestamp(s), margin(s) of error for the coordinates (*i.e,*. "maps display radius"), and source(s) from which the location data was derived (*e.g.*, GPS, Wi-fi, Bluetooth), if available. Google will not, in this step, provide the Google account identifiers (*e.g.*, example@gmail.com) associated with the devices or basic subscriber information for those accounts to the Government.

b. The Government will identify to Google the devices appearing on the list produced in step 1 for which it seeks the Google account identifier and basic subscriber information. The Government may, at its discretion, identify a subset of the devices. To the extent possible, the Government will request identifying subscriber information only for devices that are, or conceivably could be, travelling westbound on U.S. 62.

c. Google will then disclose to the Government the Google account identifier associated with the devices identified by the Government, along with basic subscriber information for those accounts.

28. This process furthers efficiency and privacy by allowing for the possibility that the Government, upon reviewing contextual information for all devices identified by Google, may be able to determine that one or more devices associated with a Google account (and the associated basic subscriber information) are likely to be of heightened evidentiary value and warrant further investigation before the records of other accounts in use in the area are disclosed to the Government.

29. Information provided by Google will then be used to cross-reference with the Oklahoma Tax Commission database to potentially identify the suspect vehicle registration and/or the driver of suspected vehicle.

CONCLUSION

30. Based on the foregoing, I request that the Court issue the proposed warrant, pursuant to 18 U.S.C. § 2703(c), authorizing the search of the property described in Attachment A and directing direct Google to disclose to the Government any information described in Section I of Attachment B that is within its possession, custody, or control.

31. Additionally, because the warrant will be served on Google, who will then compile the requested records at a time convenient to it, reasonable cause exists to permit the execution of the requested warrant at any time in the day or night.

Dustin Thornton, Task Force Officer
Federal Bureau of Investigation

Sworn to and subscribed to before me this the 1st day of April, 2021.

United States Magistrate Judge
Eastern District of Oklahoma

ATTACHMENT A

Property To Be Searched

This warrant is directed to Google LLC and applies to:

(1) Location History data, sourced from information including GPS data and information about visible wi-fi points and Bluetooth beacons transmitted from devices to Google, reflecting devices that Google calculated were or could have been (as indicated by margin of error, *i.e.,* "maps display radius") located within the geographical region bounded by the latitudinal and longitudinal coordinates, dates, and times below; and

(2) identifying information for Google Accounts associated with the responsive Location History data.

- Date/Time Period: **03-18-2021 from 21:52 – 21:56 hours (CST)**

- Target Location: **Geographical area approximately 1000' by 170' and identified as a polygon defined by the following latitude/longitude coordinates (see below)**
  - **35.80815, -95.07356**
  - **35.80778, -95.07328**
  - **35.80686, -95.07652**
  - **35.80645, -95.07627**

- Time Restriction: **Devices that reported their location more than once within the Target Location on the date and during the time period above <u>and</u> where no more than three minutes elapsed between the time that the first time the device reported its location and the last time that the device reported its location.**

ATTACHMENT B

Particular Items to Be Seized

I. Information to be disclosed by Google

The information described in Attachment A, via the following process:

1. Google shall query location history data based on the Initial Search Parameters specified in Attachment A. For each location point recorded within the Initial Search Parameters, and for each location point recorded outside the Initial Search Parameters where the margin of error (*i.e.*, "maps display radius") would permit the device to be located within the Initial Search Parameters, Google shall produce to the Government information specifying the corresponding unique device ID, timestamp, location coordinates, display radius, and data source, if available (the "Device List").

2. The Government shall review the Device List and identify to Google the devices about which it seeks to obtain Google account identifier and basic subscriber information. The Government may, at its discretion, identify a subset of the devices.

3. Google shall disclose to the Government identifying information, as defined in 18 U.S.C. § 2703(c)(2), for the Google Accounts associated with each device ID appearing on the Device List about which the Government inquires.

II. Information to Be Seized

All information described above in Section I that constitutes evidence of violations of Title 18, United States Code Sections 13, 1151, and 1152 as well as a violation of Title 47, Oklahoma Statutes, Section 10-102.1 on March 18, 2021 involving unknown person(s).